

CLAIMS:

What is claimed is:

1. A tool for tensioning safety cable to a predetermined tension limit, the tool comprising:

a body adapting for operatively mounting the tool to a power assisted tool;

5 a wheel mounted for rotation about an axis of the body substantially perpendicular to an elongate axis of the body for retaining cable wrapped around the wheel and allowing tension to be applied to the cable by rotation thereof;

a clutch, operatively connected to the wheel, for transferring a rotational force to the wheel, the clutch preventing rotational force from being applied to the wheel when a predetermined cable tension has been reached;

10 an elongated nosepiece extending from an end of the tool, a distal end of the nosepiece having an aperture for passing the safety cable therethrough generally transverse to an elongate direction of the nosepiece, the nosepiece further having a passageway extending from a proximal end of the nosepiece in the elongate direction to an intersection with the aperture; the distal end of the  
15 nosepiece being retained in the body;

a plunger mounted in the passageway in the nosepiece for reciprocating motion therein, the plunger having at least a portion thereof extending outwardly from the proximal end of the nosepiece, the plunger actuated by the power assisted tool;

20 a retainer attached adjacent an end of the at least a portion of the plunger extending outwardly of the nosepiece;

spring positioned about the at least a portion of the plunger, the spring means being generally compressed between the proximal end of the nosepiece and the retaining means for urging the plunger in a direction away from the  
25 aperture;

a collar fixed to the tool for retaining the proximal end of the nosepiece extension therein, the nosepiece extension being slidably retained to the tool and

rotatable about the elongate direction for aligning the aperture at selected angular directions transverse to the elongate direction.

2. The tool of claim 1 wherein the wheel further comprises:

a faceplate attached to a face of the wheel; and

5 an axle having a flared portion for wedging a cable, wrapped around the axle between the faceplate and flared portion, against the faceplate and preventing tangential slipping of the cable about the axle.

3. The tool of claim 1 wherein the clutch further comprises:

a knob for applying a rotational force to the wheel; and

10 a clutch ring, attached to the knob for transferring rotational force to the wheel and prohibiting transfer of rotational force to the wheel when a predetermined rotational force is applied to the knob.

4. The tool of claim 1 wherein the nosepiece comprises alignment

means for angularly aligning the plunger in a fixed angular orientation within the nosepiece for rotation therewith.

5. The tool of claim 1 wherein the plunger includes a second retainer

positioned adjacent the proximal end of the nosepiece for slidably retaining the plunger within the nosepiece.

6. The tool of claim 1 wherein the proximal end of the nosepiece

20 comprises a flange extending radially outward of the proximal end of the nosepiece.

7. The tool of claim 6 wherein the nosepiece being axially moveable

by depressing the nosepiece in a direction to compress the spring to displace the flange to enable rotation of the nosepiece about the elongate direction.

8. The tool of claim 6 wherein an end of the plunger, when operatively mounted on the power assisted tool, is in abutting contact with a piston on the power assisted tool to maintaining the plunger in a fixed position when the nosepiece is depressed.

5 9. A tool for tensioning safety cable to a mechanically set tension limit and for terminating the cable when the cable has been tensioned to the mechanically set limit, the tool including a manual actuator for gripping and pulling the cable to the tension limit, and a hydraulically assisted actuator for crimping a ferrule onto the cable when the tension limit has been reached, the  
10 hydraulically assisted actuator being operative to sever a free end of the cable concurrently with crimping of the ferrule.

10. The tool of 9, wherein the manual actuator further comprises a tensioning wheel for retaining cable wrapped around the wheel and allowing tension to be applied to the cable by manual rotation thereof.

15 11. The tool of claim 10, further comprising a clutch for transferring a rotational force to the wheel, the clutch preventing rotational force from being applied to the wheel when a predetermined cable tension has been reached.

12. The tool of claim 9, the hydraulically assisted actuator further comprising a plunger for progressively crimping the ferrule as the hydraulically  
20 assisted actuator is operated.

13. The tool of claim 12, the hydraulically assisted actuator further comprising a shearing edge, operative in conjunction with a ferrule edge, for severing the free end of the cable as the ferrule edge is forced past the shearing edge by the plunger as the ferrule is being crimped.

14. The tool of claim 12, wherein the manual actuator further comprises a tensioning wheel for retaining cable wrapped around the wheel and allowing tension to be applied to the cable by manual rotation thereof.

5 15. The tool of claim 13, further comprising:  
a clutch for transferring a rotational force to the wheel, the clutch preventing rotational force from being applied to the wheel when a predetermined cable tension has been reached.